



CALIFORNIA WATER PLAN: UPDATE 2013

PUBLIC ADVISORY COMMITTEE (AC) MEETING

DRAFT SUMMARY

DECEMBER 12, 2011

DEPT. OF PUBLIC HEALTH SERVICES

EAST END COMPLEX TRAINING ROOMS

1500 CAPITOL AVENUE

SACRAMENTO, CA

WELCOME AND OPENING REMARKS

Kamyar Guivetchi, Manager of the Division of Statewide Integrated Water Management, began the meeting with a reminder about the Water Plan eNews. This weekly email document now has 4,500 subscribers, and will be used to distribute draft Water Plan content for comment and review. Public AC members were encouraged to share the 4-page CWP brochure with their constituents. The brochure is on the Water Plan website, under the Update 2013 tab.

Mr. Guivetchi noted that, in the previous week, DWR released the *Climate Change Handbook for Regional Water Planning*. He also mentioned two noteworthy parallel planning efforts – the Strategic Growth Council's Strategic Plan (focused on integrated resource management and coordination among State Agencies), and the California Department of Fish and Wildlife Strategic Mission (involving a blue ribbon citizen committee and a stakeholder advisory committee). In closing, Kamyar mentioned the work of the Western States Water Council, which has a federal agency support team and provides a collaborative venue for interacting with federal agencies.

PROJECT UPDATES

Paul Massera, Water Plan Program Manager, highlighted Update 2013 milestones: the Assumptions and Estimates Report is scheduled for release in April 2012, followed by the California Water Management Progress Report at the end of 2012. Since the Plenary (with a final attendance of 226), there have been meetings of the Groundwater Caucus, Finance definitions subcommittee, Tribal AC, and regional reports' authors kick off meeting. Upcoming meetings include the Tribal AC, Land Use Caucus, RMS workshops, and Regional Forums.

Abdul Khan, DWR Sustainability Indicators Lead, provided a brief update on the Sustainability Indicators framework. A draft framework was vetted with the Public and Tribal Advisory Committees, and introduced at a public workshop. Comments were incorporated into the current draft, which is now undergoing internal review. By the next Public AC meeting, a revised draft will be available for review. The team is also looking at pilot areas for data analysis. The goal is to select a project area, with results by the end of May 2012. Feedback will be sought during the detailed pilot area process. The pilot study will then be applied to other hydrologic regions.

THE DISADVANTAGED COMMUNITIES/ENVIRONMENTAL JUSTICE CAUCUS

Lisa Beutler, Executive Facilitator for the Water Plan, conveyed how Maria Kennedy, a Public AC member, envisioned a Disadvantaged Communities (DAC) Caucus during the recent Plenary session. The topic of DAC has always been touched on in the Water Plan, without receiving the

full development that this topic deserves. The vision was to convene a caucus comprised of members who work on this topic all the time. A design team has already been convened, with input from Debbie Davis with the Governor's Office of Planning and Research (OPR). Today's panel discussion provides an introduction to this topic, and will inform discussions on the scope of work for the DAC and Environmental Justice (EJ) caucus.

Debbie Davis, OPR, gave a quick overview of definitions. The concept of Environmental Justice is defined in Government Code Section 65040.12 as "The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." Ms. Davis emphasize that the key word is "fair" – as in equitable. Update 2009 laid out four requirements to meet the fair treatment clause:

- Disadvantaged and disproportionately impacted communities must be identified and engaged.
- The water-related needs of these communities must be identified, and potential solutions developed and funded
- The impact of water mgmt decisions on these communities must be considered and mitigated
- All state programs must be evaluated to document progress.

DACs are defined in Water Code 79505.5 as communities with less than 80% of the statewide median household income (MHI). Drinking water wastewater and flood programs have statewide preferences and programs for DACs. For example in the IRWM program, the "match" function can be waived for DACs.

The MHI threshold poses some difficulties. There is a challenge is identifying pockets of poverty, since census tracts may not be precise enough to located these areas. Higher costs of living in urban communities may mean that urban DACs will not have a MHI that is less than 80% of statewide MHI.

There are many opportunities to integrate EJ/DACs into the Water Plan. Update 2013 goals and objectives should ensure: access to safe drinking water, protection of tribal uses of water, support water quality standards that recognize subsistence diets dependent on fish, and restore and protect watersheds. Other considerations include: flood risk and recovery efforts; planning for water resilient DACs in the face of climate change, water affordability for DACs; and full inclusion of DACs in planning processes, especially IRWM.

Maria Elena Kennedy serves as a co-chair for the work group on Disadvantaged and Tribal Communities, supporting the development of the Santa Ana Watershed Project Authority (SAWPA) IRWMP. The work group sees DACs as partners, coming together to help resolve many water quality challenges – including having to cross through sewage. Much of the work done is done in Spanish. The SAWPA IRWMP work group combines Tribal and DAC, respecting the inherent difference between these two types of communities.

Residents of DACs are engaged in culturally appropriate ways, taking input on problems and solutions that community members see in the watershed. It is a bottom-up process, asking residents to help define priorities and solutions. Some of the difficulties that can arise in working with DAC and EJ communities include:

- Language barriers
- Cultural barriers
- Lack of access to mainstream modes of communication
- Isolation from the political process

Overcoming these challenges requires creative solutions:

- Bilingual facilitators working in the community
- Low tech approach – using paper flyers, one on one conversations, and walking in the community (many residents do not have access to computers, or cars – Quail Valley has a mobile library which helps)
- Get to know the residents! (They are our friends, not subjects)
- Encourage residents to engage in the IRWMP process

Community meetings with the residents are critical. One meeting was held in a resident's backyard. High profile involvement from elected officials is great, and provides role models for youth. The residents of DACs are project allies:

- Engaging the residents in the DACS is critical in showing them that they are an important part of the planning process.
- If the project is funded, then the residents are your biggest allies in the process.
- People want to be involved, but in DACs and minority communities, they often aren't familiar with IRWMPS. If you engage them in the process, they will learn and help (for example, school children will help distribute flyers, trusted messengers will spread the message within the community)

Holly Albert, Program Manager for the Inyo-Mono IRWM, discuss DWR grants for IRWM outreach to DACs. This funding, from Prop 84, supported five pilot projects to conduct DAC outreach in IRWM planning areas. Inyo-Mono IRWM received one of the awards to engage Tribes and DACs throughout the area. The DACs are typically small, rural Caucasian communities, with some instances of very low income. Many local Tribes also meet the definition of DACs. As mountain headwaters communities, local needs are different from downstream communities which import local source waters.

The IRWM group brought on an outreach specialist for this process. Each community brings new issues. The pilot effort will run for 18 months, and look at identifying alternative means of defining DACs (which sometimes fall out of census holes). The effort involves reaching out to DACs, building capacity, convening region-wide DAC summit, and working with DACs in other regions and other IRWM groups. Other DAC grants were awarded to Greater L.A., North Coast, Coachella, and Upper Kings River IRWM groups.

Questions and Comments

Comment: One of the challenges in the headwater areas is developing community capacity for creating an initial plan. The headwater areas involve high levels of federal land ownership. It would be great if that could be addressed. One of biggest problem is wildfires, and many rural systems have no way of addressing fire threat. There needs to be a nexus to fire protection in disaster management.

Small water systems are often failing and unreliable. In some cases, there is uncertainty about the water rights held. In terms of capacity building, many rural counties and locals do not have enough planning staff. Finally, the model for the state seems to be seas of prosperity with island of DACs. It is the opposite in rural areas where DACs are so spread out. A model is needed to address disadvantaged areas with pockets of prosperity.

Question: How are DACs defined? Some of these communities are very small. Is there a standard? The DACs don't seem to fit census tracts.

Answer from Maria Kennedy: This is a big challenge. For state funding, the 80% MHI rule applies. There is a clear need for a better definition, because the current one is inadequate. We would like DWR to start looking at this.

Answer from Debbie Davis: The 80% rule comes out of a discussion from the EJ Coalition for Water. It was established to help distribute money statewide. The 80% rule tries to shift the balance to help drive investments in rural communities. There are urban communities without safe water, but it is much more common in rural areas.

Question: When it comes to DACs, it seems like economic and water infrastructure conditions are related. How do you see the leveraging of other social economic drivers and local development entities to help with this process?

Answer from Holly Albert: As IRWMs we can utilize a network of players, often not related to water, in helping us in small water systems and seeing what resources are needed. Often, we can help link people up and facilitate conversations through just knowing people in the region. It can be more than just funding, we can build a network.

Answer from Maria Kennedy: Water quality can be tied to housing issues. SAWPA has significant opportunities to leverage partnerships.

Answer from Debbie Davis: In the state of California, we are moving towards building sustainable communities. There are more and more opportunities to bring people together from diverse areas.

Question: Are you aware of the Department of Public Health's Prop 50/84 stakeholder committee can be a resource to the DAC caucus? There is a meeting this Thursday.

Answer: Yes, it is great to making those connections. We will be on that call.

Question: The panel has probably has experience with Tribes, and Tribal lands and trusts. But allotment lands often do not receive the same level of attention. These are from 20 to 320 acres in size and meet the definition of DAC. The unique structure and governance of these lands is something to be aware of. They are different from other public domains. Here the focus is on O&M of new water systems. How are you addressing DAC/EJ issues when it comes to tribes?

Answer from Debbie Davis: The Tribal issue is complex. For example, USDA grants can only be awarded when there is one person who holds the land title. This is not compatible for unofficial tribal trusts. O&M costs are a really important issue in terms of access to funding – since O&M money is hard to come by. I hope that the finance caucus will address this difficulty.

Answer from Holly Albert: We have had great engagement and success in the larger tribal communities. The participation of small tribal communities is still missing sometimes.

Answer from Maria Elena Kennedy: In the Santa Ana watershed, we are fortunate to have the right partners in place. We have a formal Tribal chair who works with the Bureau of Reclamation in Southern California, which goes a long way in helping the process succeed.

Question: What kind of statewide resources exist in helping the Water Plan address DACs? Is there any information base showing the location of DACs? Is there information on who and where people don't have safe water? Septic tanks and flood risks? I think that this resource would help educate everyone on this issue.

Answer from Debbie Davis: We have been building that information base for 10 years. SWRCB and DPH are in the process of generating a report that shows high risk communities for unsafe drinking water. The list of applications for safe water drinking programs at Water Boards and Public Health is a great resource. Individuals on septic and isolated communities are harder to obtain information on, and we do not have a good strategy for those areas.

Question: My question is on identification. It seems like census tracts in rural communities have made the process very difficult and expensive. It is not an easy process even getting them to self identify. How you can you help us help them?

Answer from Holly Albert: We have had the same problem. We are still figuring it out and will be more than happy to share what we've learned.

Answer from Maria Elena Kennedy: The best thing is to go visit underserved communities. One of our flood control agencies identified a trailer park that was a DAC, and this showed up in the census data. However, when I visited and got ground truth, I realized it was NOT a DAC. It takes time up front, but getting clarity saves time and resources.

Answer from Debbie Davis: A great tool is county health departments. Engage them in your water planning.

Meeting participants were asked to address several questions:

- To what extent are DACs something that your organization is working with?
- Are there trends that you have noticed that we need to be paying attention to (i.e. rate issues, septic tanks)?

Group Discussion:

Comment: From a jurisdictional perspective, we are worried that these communities are not adequately represented because of their boundaries. The rural parts of the state are so decentralized, which works against the public water agencies. There are some models (i.e. Kings River), but a lot of the groundwater issues cannot be narrowed down to a specific entity.

Comment: There is a study being funded by UC Davis and SWRCB that will shed light on nitrate issues. Another issue is O&M funding for infrastructure solutions.

Comment: One issue is trying to identify the critical needs of DACs. Another issue is going after money for planning applications. The State Lands Commission has an EJ focus, as does the American Planning Association. There is a parallel movement in the health impact assessment in planning documents.

Comment: The Floodplain Management Association has hosted tribal roundtables, and we encourage agencies to take this into account. There is a pilot project in San Diego region, and I wonder if the DAC caucus would use a similar pilot.

Comment: As part of our prop 84 grant, received funding to contract with Rural Assistance. This provides sub-grants to small water agencies and communities, providing funding assistance to go after planning grant money in IRWMS. If this works, it could become a model for the rest of the state.

Comment: Regions will not have economic success unless we address water issues in these DACs. From a water resources standpoint, we need to have a better handle on these economic opportunities. Many outside entities don't necessarily employ locals when they come into work in DAC areas. From an employment situation, it is great to involve local governments.

Comment: It would be great if there were tools, at the regional level, to get better data and visual representations of DACs. At the IRWM level, what are going to be the requirements? When you start to look at data, we are collecting a lot of information on reservations. Don Bradford, Director of Sanitation Facilities Construction for Indian Health Services, has an inventory of Tribal water systems. Going after other communities is difficult, but you have to evaluate situations at the ground level and go after the resources that are available.

Comment: There is a long history of including EJ in water planning. It is worth drawing upon that literature, and following the definition on EJ and processes for involving EJ communities.

Question: Regarding the procedural, in our area the DACs have city governments and councils, is that adequate?

Response: It depends on the functionality of the entity, and their representation of DACs. EJ processes are decentralized, so you are not just getting a single representative for decision-making.

Lisa Beutler noted that these items will be rolled into caucus discussions. Looking at the Caucus charter, the focus is on underserved communities. We have been struggling with economic definitions. The concept of underserved communities creates a broader discussion. The charter also encompasses different topics: water infrastructure, flooding, the cost of water, etc. The baseline context for this work is Objective 13 from Update 2009. There is an imperative to act. This caucus will closely coordinate with the Tribal AC, and Groundwater and Water Quality caucuses, in terms of integration and getting input. There needs to be a dialogue among these topic-based caucuses. Any investment recommendations will go to the Finance Caucus.

Caucuses will not create new data, but will find and leverage existing data. There may be a need to identify collaboration opportunities with other agencies and organizations who are working on this. Another area is looking at legislative and regulatory proposals currently moving through the government. DAC issues are place-based and unique, which is a regional issue. We would like to compile a directory of outreach contacts within each region, creating a resource list to help people working on this. We will take nominations on members of the caucus, and take comments on the charter.

Question: At the end of paragraph one, does water treatment include wastewater? Please clarify.

Answer: Yes, water treatment includes wastewater.

Comment: The issues of capital costs, O&M and planning costs should be flagged and addressed

Comment: Regarding the cost of water, there are DACS served by wells. This is a double tax because of electricity. This is an issue that should be captured.

Question: Is agricultural water being connected to employment for DACS?

Answer: That has been discussed. It's unclear how to characterize that.

Comment: It also happens that sometimes DACs have bent over backwards to bring in industry with adverse environmental impacts.

Comment: In the southern California, there is a challenge with alternative energy. This can impact DACS and watersheds.

Response: This whole employment piece is something that has been struggled with. It will be added to the discussion. Employment can't be untangled from water. It's a conundrum that this caucus can address.

Lisa Beutler thanked everyone for their comments, and asked them to consider any charter amendments and nominations for Caucus membership. The caucus will convene in January or February. The sooner we get feedback from you, the sooner the design team can get to work.

Question: Will membership require travel to Sacramento?

Response: We will try to make webinar an option, and we will do what we can to facilitate regional meetings. We are going to make this work

Kamyar Guivetchi noted that this will be an agenda item on the regional forums. They are intended to share water planning information in the various regions. We would like to include DAC/EJ caucus meetings in these sessions.

INTEGRATED REGIONAL WATER MANAGEMENT

Tracie Billington, Branch Chief for IRWM Financial Assistance, reported that there has been great progress on getting everyone involved in IRWMs in California. The Finance Assistance program provides significant funding for IRWMs, including DAC projects. In some areas, over 60% of projects in a region tied to DACs. Different funding pots focus on different types of benefits – for example, flood projects.

It was reported that Round 2 solicitations will be out by end of the month. As a result of process improvements, there are differences on the 10% DAC requirements for critical needs. Examples of Round 2 process improvement discussions include a clarification that water metering activities do not meet the standard of a critical issue, in the way that a safe drinking water issue does. The December 20th meeting at CalEPA meeting will be webcast. The application deadlines for planning grant solicitations will be somewhere near late February or early March. The next local groundwater assistance grant will likely be the last one. We are staggering the application submittal deadlines, so that people are not working on all these grants at the same time.

Discussion

Question: What is the difference between summer 2012 and mid-2012?

Answer: Summer goes until 21st of September, representing a broader time frame. Round 3 will commence immediately after Round 2 (early 2014), and this depends on future appropriations and bond sales.

Paul Masara noted that the Water Plan Finance Framework will be looking at what happens when IRWM funding runs out in 2014. Please attend if you are interested in that.

Question: Can you highlight the key changes/modifications to the priorities in grant implementation?

Answer: We are not really changing priorities, but we are including some of the legislative requirements such as compatibility with CASGEM. There are requirements for the 2010 UWMPs, and on surface water diversions. Those are the types of requirements that we are addressing. There are places where the review team has flagged issues, especially clarification on DACs in urban areas and critical needs. One of the areas is that the responses on benefits and economics is onerous.

Question: There was confusion regarding the 80% MHI rule for DACs. Could you clarify the scale that is done at?

Answer: Determining the appropriate scale is an issue. From a county-wide perspective, you are dealing with certain pockets of DAC. Serving them is an issue. In urban areas, often they don't show up at census block levels. Should we be looking at percentage of cost for regional water management projects? There are difficult questions like that. Also, with differences in Regional MHI and State MHI (i.e. the Bay Area) some DACs don't meet those 80%.

Question: How much flexibility is there in handling DAC requests? Do you coordinate with each other and move applications into IRWM side where they apply better?

Answer: We have the ability to improve coordination, but we have written guidelines for the application process. If we saw a project and we know about it, we might direct them to that. We do encourage folks to put in applications wherever they can. We understand that that is difficult for DACs.

The Caucus can look at the difficulties of the application process for DACs.

Question: Is it a priority of DWR to go after DACs for the IRWM Plan Updates?

Answer: For Round 3, we have not identified IWRM planning grants. The funding would have to come 100% from the regional funding area allocation, and there are limitations on how much overall we can spend on planning and monitoring. At this point, the states commitment to regional planning under this mechanism is met through these rounds of funding.

LUNCHEON SPEAKER: Natural Resources Conservation Service

Lisa Beutler mentioned that the afternoon agenda will start the conversation on a sediment management resource strategy in Update 2013. Soil retention and replenishment is important to agricultural and coastal communities. The luncheon presentations will describe how NRCS is thinking about this topic, and its unique nexus with the Water Plan. Ms. Buetler introduced Sid David, Manager of the NRCS mapping program, and Rebecca Chandler, NRCS Water Quality Outreach Specialist. Both work out of the Davis office

Mr. Davis began his presentation with a review of where sediment load originates. The load comes from natural weathering, denudations (fire, deforestation, etc) and the transport comes from suspension in water bodies or air. Major contributing factors are natural process such as earth orbit variations, sea temperature fluctuations, and seismic and cyclonic processes. Runoff comes from natural, urban development, and agriculture/forestry/manufacturing activities. Average processes are imperceptible, as materials move in “pulses, slugs, or major events.” Glacial movement is a long-term process, where as major storms represent short term processes.

NRCS mapping efforts are ongoing. Online resources include: Soil Data Mart, GIS soil data viewer, geospatial data gateway, and the soil survey. There is also a soil web application for smart phones which assists work in the field. A salinity map has also been developed. Mr. Davis reviewed GIS elements of the NRCS mapping layers and databases. Maps and related interpretations provide predictions on infiltration, drainage, and runoff for most of California.

Ms. Challender recapped the history of NRCS, and how the agency deals with sedimentation issues. NRCS (previously the Soil Conservation Service) was formed in the 1930s by Hugh Hammond Bennett, under the USDA, to address the detrimental effects of soil erosion on the landscape. In 1934, Mr. Bennett warned a congressional committee of a dust storm. The concept of working one on one with agriculture is from this era, and is still effective. President Clinton renamed the agency, to reflect a commitment to all resources. However, it still often comes back to soil erosion. For example, stream bank erosion affects water quality. Dust affects air quality.

NRCS is a voluntary agency, whose work must be invited by partners; we cannot force ourselves on anything. The agency takes a flexible approach to adapting conservation practices. NRCS can often serve as a liaison when it comes to implementation of regulations. One of their largest services is developing conservation plans for landowners, finding solutions consistent with unique management styles. Other programs include the Environmental Quality Incentives Program, providing financial and technical assistance to agricultural producers. In terms of water quality, NRCS developed an index showing erodability, rainfall, current farming practices, soil types, and show how likely they are create a water quality issue – as well as mitigation practices.

The Agricultural Water Enhancement Program includes a long list of partners in environmental stewardship. The program works to help farmers integrate conservation practices into their current efforts. Once again, NRCS needs to be invited to participate by our partners. The agency's involvement can be varied and flexible – relying on a range of proven and standardized practices.

SEDIMENT MANAGEMENT STRATEGY

Lisa Beutler explained that when the Water Plan team started talking about a sediment RMS, there was discussion about where sediment/erosion processes would affect water managers. The following points were made:

1. Above the dam, and downstream effects
2. Inside the waterway
3. At the deposit end point for deposits
4. As it relates to water quality (i.e. dissolved solids)

It wasn't clear if this was one RMS or two. It wasn't clear how to "cut the issue." As a result, a panel has been convened today to talk about the different aspects of sediment. The participants are:

- Jamie Anderson, DWR (conducts Delta modeling for sediment and mercury)
- Rebecca Challender, NRCS, Water Quality Outreach Specialist
- Sid Davis, NRCS, Manager, Mapping Program
- Chris Huitt, State Lands Commission (reviews sand mining plans in SF Bay)
- Rick Obsen, USFS
- Kim Sterret, Boating and Waterways Manager, Public Beach Restoration Program
- Angela Wilson, Central Valley Water Board, Timber Program Manager

How would you describe the current situation with sediment and critical issues for water managers?

- (Jamie) Everyone needs field data collection. Without mentoring, it's hard to know what is actually happening. This will be important for any water manager.
- (Angela) This is a good start. Knowing what others are doing is important. It's also important to understand the regulatory environment in upper watersheds.
- (Kim) We are downstream users, and often view flood and water quality managers as part of the problem. Structures that block sediment and eliminate peak flood flows reduce sediment flows to beaches. We have rivers that have 0% sand delivery to our beaches. We try to restore the natural supply of sand to beaches. It is a major component of our coastal economy – when you erode the beaches, you take away a large portion of state recreation. Coastal parks are 2.5% of State Park holdings, but almost 60% of attendance. \$10 to \$15 billion in tax revenue from beaches, with 35% in California.
- (Chris) Within the state, sand mining operations will secure leases through SLC, and in the event that a discretionary action is needed we will do an EIR. We have done extensive modeling and studies which indicate significant short-term turbidity from sand mining operations. These generate revenue for the state and construction materials. In terms of air quality, we have been doing hazard assessments and are not seeing large

impacts to shore communities. From a SLC standpoint, the revenues generated by this agency are proportionally quite high. We are doing well in the current budget climate because of these leases.

- (Rebecca) In terms of regulatory compliance, I would suggest that all efforts be made to encourage voluntary participation. If something must be mandated or regulated, there are often gaps in coordination among agencies that have significant impacts on individuals in agriculture and other community areas.
- (Rick) For permitted activities in National Forest service lands, we have recreation, timber, cabins, rafting, skiing, cattle grazing. We look at these activities to see if they are adding sediment to the system. A second area is the “legacy issues.” One example is the enormous road system on national forest service lands (comparable to the highway system) left over from old management strategies. There are also legacy issues associated with the policy of immediately putting out fire systems. The third consideration is landscape scale ecological restoration of our forests – what do we want them to look like? We spend a lot of time improving forest management practices, including fuel reduction support healthier, less fire-prone forests.

In terms of what’s happening upstream, is there anything in particular that water managers should really be paying attention to?

- (Rick) The Amador- Calaveras Consensus group is a very enjoyable group to work with. The group mission is to create fire-safe communities, healthy forests and watersheds, and sustainable local economies.
- (Kim) In terms of water supply, dams kill sediment delivery; it’s expensive to bypass dams for sediment removal. If flood protection managers could be more cognizant of these needs, and not do things that put concrete channels in river systems (like L.A.), we would appreciate that. I don’t have many solutions, we are more focused on what’s happening on the coast.
- (Angela) Best management practices are changing all the time. I have seen a major improvement in how we handle sediment that comes off roads. We focus on anthropogenic causes, and we are making incremental improvements. Our area encompasses 60% of the timber harvests coming out of the state – we are only one of 3 boards that handle timber harvesting.
- (Jamie) Management practices and awareness is changing as society’s goals change. The need for gravel in upstream rivers for salmon spawning is a newer one. Acknowledging that values are changing, and managing these new values in systems that exist based on old values will be an issue.
- Sid: Our NRCS database is unique and can predict water runoff in whole watersheds. It is still being refined. Most farm soils were brought in by large or high-sediment events. There are buried soils. There will likely be future events that we will not be able to manage for, and they will solve/create problems.

Question: Starting out, there is a tension between floodplains not getting the soils, and the beaches not getting the sand. Both are necessary for the state to maintaining economic viability. How do we balance these needs?

Answer (Chris): There has always been speculation as to how much sand is actually available in the bay and how much we are depleting. The issue is monetary. The issue is accretion, these issues can be good and bad in terms of revenue and management of the marinas. From the State Lands standpoint, we want more sand and less sediment in the channels where commerce flows. There is a lot of research going on right now.

Answer (Kim): It is very difficult to move sediment downstream from behind dams. The scale is huge and the cost is expensive. Our focus is trying to maximize coastal sediment, and we believe that there are dams that can or should come down. There are new difficulties associated with that as well.

Question: What about hydrodynamics in the middle of the watershed, and the channels crossing roads, where former base flows occurred? What is the current potential for dynamic equilibrium to be restored? With wetlands, gravel, and natural functions, what is essential to water managers while the sediment is moving through the system? With respect to legacy systems trying to be compatible with newer values, water channels drop sediment differently now than they did before we made these systems.

Answer (Chris) I am interested in where the sand ends up. Any and all dredging requires a lease from the SLC. We are one of the few agencies that charges a significant amount of money to process that. We do propose leases for all of these types of activities. From a water quality standpoint, we look for discharges to restoration sites. I reviewed the Hamilton wetlands restoration project, and the Montezuma project. I think more management of these, and movement of materials. There is a need from a water manager's standpoint to find suitable materials for restoration.

Answer (Angela): It is interesting to me. We are not oblivious to the need for sands, but our primary directive is to limit the movement of sediment. I know you are aiming for sediment deliveries lower in the watershed. We focus very closely on the roads and water course crossings. We have thousands of miles of legacy loads with undersized culverts that need removal. There is material being stored behind culverts that will need to be systematically addressed. In the private timber world, the BMPs are vetted with the Department of Forestry. On these at least, they are required to have 100-year culverts. In my time, we have freed a lot of material back into the streams to bring it closer to the natural system.

Answer (Sid) I think you might get at the problem by studying the floodplains a little more closely, and find out when this material arrived through carbon-14 analysis. That was done on a Colorado River project, in a system that had changed dramatically over the last 700 years. You can see this in the analysis, and there is a similar climactic signature now. We are much wetter now than when we got a lot of these materials, and we are likely stuck managing what we got.

Lisa Beutler summarized that the Sediment RMS will address these significant issues, which are dependent on where – in the system – one is located. The floor is now open for questions.

Discussion

Comment: My clients are in the headwaters. If you want sediment – we can always bring back hydraulic mining. Soils also have a vegetation component. Fuel management in the Sierras is left over from legacy policies – affecting spring hydrographs and creating high levels of evapo-transpiration. The other part is water quality. Lots of sediment is not good for water treatment costs. Water management strategies need to be tied into this. Each region is facing its own issues.

Question: Sediment management is best achieved at the watershed scale. Sediment management plans are now being developed in various areas. What would you consider an important part of a sediment management plan? What would you add to currently ongoing planning efforts? What is achievable? What is effective?

Answer (Rick): The first thing that is missing is money. The Forest Service has new initiatives like the Watershed Conditions Framework, which is focusing on certain areas. Sea level rise is a concern, as are extreme events that are occurring due to higher levels of energy in the system.

Answer (Angela) Something that you are hearing from this group is that there are conflicting needs. If you designate a beneficial use like power generation by approving a dam, you have designated that as the most important priority by default. Doing an assessment is always the first step needed in these watersheds. Different interests have to come together to identify needs in the system

Answer (Sid) Seismic, flood and other events do not compare to heat waves. What we need to think about is how to protect agricultural lands and make sure we are able to feed our selves. Sediment is not necessarily as much a problem as is efficient water use. We have good resources available for mapping and finding these areas. We have real infrastructure in place that should not necessarily be dismantled.

Comment: Two things. Sediment starts at the highest point of our waters and has many impacts to aquatic, cultural, and natural resources. These are not always addressed appropriately. We have impacts on the fish. Who decides on where a sediment dump will be located, and is the water quality tested? The Tubatulabal Tribe is currently entering into a programmatic agreement with the Corps of Engineers to be involved in that process in Lake Isabella.

Kamyar Guivetchi expressed his appreciation for this effort. It's a great example how agencies approaches are not aligned in addressing different pieces of the same issue. This RMS will allow us to connect some of the dots throughout the policy sphere on this issue.

SCENARIOS

Mr. Juricich, DWR Data and Analysis Lead, provided an overview of the approach to integrate scenarios into Update 2013. The goal is to support decision-making in the presence of uncertainties. This includes how factors such as climate, land use, and population affect water demand. Over the next few years, the Water Plan will conduct an initial evaluation of how resource management strategies (RMSs) perform to help meet changes in demand. The evaluation will assess RMS benefits, costs, and trade-offs.

These efforts involve Water Evaluation and Planning (WEAP) modeling that links hydrology and water management. The model uses monthly data as inputs for precipitation, conditions of water features (rivers, groundwater basins, reservoirs, etc.), and demand levels for indoor, irrigation, and landscaping water use. This provides an integrative approach to assess and report on alternative future conditions, and to provide high-level information on RMS performance.

Data collection is essential for this type of analysis. The Water Plan is always seeking additional partners who can expand on what has been done to date. The initial evaluation of RMS strategies will focus on the regions in the Central Valley – the Sacramento River, Tulare Lake, and San Joaquin River regions – where significant data has already been collected by different efforts. This is intended to assist local policy makers in the decision process.

Meeting participants were asked to work at their tables and provide feedback on two items:

1. Describe the 3 most important target audiences for the scenarios and response packages.
2. For each audience, describe the questions they will want the scenario models to answer.

It was clarified that the Water Plan scenarios represent plausible futures – not predicted futures.

Group Reports

Table 1

- The definition of plausible futures is an important clarification. There was general agreement among table members that water agency decision-makers are not the likely audience for this work. In thinking about creating and investment approach for strategies, the modeling might highlight “no regrets” strategies that help meet demand under several scenarios.

Table 2

- The most important audience will be funding entities, including public-private partnerships.
- What are the right questions that the scenario models can answer? What do we hope audiences will ask?
- Have some statewide capacity to ask “what if” questions. What combinations of things create really bad situations? What combinations give a greater risk of failure? Data has been used and abused. Let’s put our arms around what we do know. What do we need to know in order to take an action? We have to agree what those bookends are. We need to talk about how the Delta affects management decisions.

Table 3

- What this document ought to do, is convey a story. Pick the 4 or 5 messages that this document can tell. Use this tool while you have their attention.
- The audiences will want to understand what the suite of RMS options are.

Table 4

- The audiences are: policy makers, decision makers and/or elected officials; and water purveyors, commercial/industrial/institutional water users, and ag users.
- For all of the scenarios, a key question is: Who is going to actually manage this? Policy makers and elected officials will want to look at the current legal and policy framework. The purveyors will want to know about costs. What is the cost on interest groups? What trade-offs are involved? Who is going to finance the future? The PPIC talks about beneficiary pays – who will finance the beneficiary pays?
- What key tradeoffs are involved in trying to address the co-equal goals of sustaining the environment and the economy?

FINANCE CAUCUS OVERVIEW

Kamyar Guivetchi discussed the work to date on the Finance Plan. He noted that there was not shared meaning on what the finance plan should contain. As a result, a Finance Caucus was established to work through items of clarification, to develop shared terms and meanings. This is the first time that the Water Plan has addressed finance. A high-level approach will be used, providing a scope that is broader than estimating costs and identifying funds- roles and responsibilities. Staff developed four questions that have been asked by stakeholders, regarding the Finance Plan:

Given the uncertainty of (and opportunity to inform) future financing of State government Integrated Water Management (IWM) activities and services...

1. What types and magnitude of IWM activities and services should State government provide?
2. What might the range of costs be for State government IWM activities and services?
3. How (and by whom) could State government IWM activities and services be funded?
4. How should the Update 2013 IWM Finance Plan frame/recognize regional and local IWM investments?

The Water Plan is asking the Public and Tribal Advisory Committees to weigh in, and determine if these four questions would be helpful to take back to the Caucus – to have the caucus work on responding to these questions. The goal would be to build on these four questions, then develop an outline of what a finance plan would entail. It was noted that a sub-committee is working on definitions. Public AC members are welcome to participate in the committee themselves, or appoint a representative.

Comment: It is critical to thoroughly evaluate economic proposals.

Comment: Cost-effectiveness and feasibility are important considerations for economic proposals.

Comment: Disadvantaged communities need a voice in economic discussions.

Comment: There is a lot of work that could be integral to these strategies. There has been a problem with long term funding assurances.

Attendance (77)

Public Advisory Committee Members and Alternates (32):

Dave Bolland, Association of California Water Agencies
Troy Boone, County of Santa Cruz, Environmental Health Services
Karen Buhr, California Association of Resource Conservation Districts
Merita Callaway, California State Association of Counties
Evon Chambers, Planning and Conservation League
Grace Chan, Metropolitan Water District
Grant Davis, Sonoma County Water Agency
Ane Deister, Entrix
Anisa Divine, Imperial Irrigation District
Mark Drew, CalTrout, Inyo-Mono IRWM
Jack Hawks, California Water Association
Al Herson, American Planning Association
John Hopkins, Institute for Ecological Health
David Kennedy, American Council of Engineering Companies
Maria Elena Kennedy, National American Indian Veterans
Karl Longley, California Water Institute – Fresno
Kathy Mannion, Regional Council of Rural Counties
Danny Merkley, California Farm Bureau
John Mills, Tuolumne-Stanislaus and Upper Feather River IRWMs
Valerie Nera, California Chamber of Commerce
Vickie Newlin, Butte County Dept. of Water and Resource Conservation
Tim Parker, Groundwater Resources Association
Wendy Phillips, League of Women Voters of California
Cindy Paulson, California Urban Water Agencies
John Ricker, County of Santa Cruz, Environmental Health Services
Larry Rodriguez, Kern County Water Agency
Mario Santoyo, California Latino Water Coalition
Jennifer Svec, California Association of Realtors
Susan Tatayon, The Nature Conservancy
Iovanka Todd, Floodplain Management Association
Bob Wilkinson, University of California, Santa Barbara
James Waters, California Waterfowl, California Outdoor Heritage
Dan Young, Surfrider Foundation

Regional Representatives (5):

Dave Eggerton, El Dorado County Power and Water Authority
Barbara Hennigan, Butte-Sutter Basin Area Groundwater Users
Tito Sasaki, Sonoma County Farm Bureau
Bob Siegfried, Agricultural Water Use Efficiency, SCVWD

State Agency Steering Committee Members (3)

Bruce Gwynne, Department of Conservation

Liz Haven, State Water Board
Darrin Polhemus, State Water Board
Vicky Whitney, State Water Board

Other (4)

James Cornelius, Sutter County Resource Conservation District
James Fryor, Integrated Water Resource Conservation Associates
Daniel Rockey, Sherman Valley Rancheria
Steven Stadler, Kings River Conservation District

Student Participants (19)

Erica Bondesson, UCSB
Molly Gordon, UCSB
John Heylin, Presidio
Kellock Irvin, UCSB
Brandon Keedy, UCSB
Sona Lee, UCSB
Chris Maddox, UCSB
Tiffany Mayville, UCSB
John Mehlhaff, UCSB
Zachary Olson, UCSB
Jared Nowe, UCSB
William Radis, UCSB
Rachel Ramos, UCSB
Isaac Reback, UCSB
Matthew Rindermann, UCSB
Matt Schmidt, UCSB
Tiffany Takade, UCSB
Scott Tomkinson, UCSB
Chi Twong, UCSB

Speakers (2)

Heather Fargo, California Strategic Growth Council
John Lowrie, Department of Conservation

Staff (13)

Kamyar Guivetchi, DWR, Chief, Statewide Integrated Water Management
Lew Moeller, DWR, Project Manager, Update 2013
Jose Alarcon, DWR, Lead for Water Quality
Emily Alejandrino, DWR, Support for Tribal AC and Environmental Services
Tito Cervantes, DWR, Northern Regional Office
Megan Fidell, DWR, Lead for Resource Management Strategies
Chas Grant, DWR, Public AC Travel Coordinator
Ray Hoagland, DWR, Economist
Rich Juricich, DWR, Lead for SWAN and Analytical Tools
Abdul Khan, DWR, Lead for Groundwater

Michael Perrone, DWR, Lead for Environmental Services
Mary Randall, DWR, Northern Regional Office
Fraser Shilling, UC Davis

Facilitation Team: Katie Cox, Judie Talbot, facilitation support; Stephanie Lucero, Tribal Facilitator; Center for Collaborative Policy, CSU Sacramento; Lisa Beutler, Executive Water Plan Facilitator